

AMENDMENTS TO CLAIMS

1-18 (Canceled)

19. (Currently Amended) A multi-stage storage system for intermittent or unstable voltages, comprising:

a DC power supply;

a first storage device connected to receive DC charging voltages from the DC power supply;

at least one second storage device also connected to receive DC charging voltages from the DC power supply;

wherein the first storage device has a lower capacity than the second storage device; and

wherein the second storage device is not charged until after the lower-capacity first storage device has been charged to a preset voltage and is available for low voltage output.

20. (Previously Presented) A multi-stage storage system as claimed in claim 19, further comprising a one-way energy limit circuit and a charging control circuit each connected in series with the second storage device for regulating supply of charging voltages to the second storage device.

21. (Previously Presented) A multi-stage storage system as claimed in claim 19, further comprising an isolation diode connected in series between the first and second storage devices.

22. (Previously Presented) A multi-stage storage system as claimed in claim 19, further comprising a voltage and current regulator connected between the DC power source and the first storage device.

23. (Previously Presented) A multi-stage storage system as claimed in claim 19, further comprising a current regulator connected between the DC power source and the first storage device.

24. (Previously Presented) A multi-stage storage system as claimed in claim 19, further comprising a voltage regulator connected between the DC power source and the first storage device.

25. (Previously Presented) A multi-stage storage system as claimed in claim 19, further comprising a zener diode connected in parallel between the DC power source and the first storage device.

26. (Previously Presented) A multi-stage storage system as claimed in claim 19, further comprising an isolation diode connected in series between the DC power source and the first storage device.

27. (Previously Presented) A multi-stage storage system as claimed in claim 19, wherein the first storage device is a secondary battery.

28. (Previously Presented) A multi-stage storage system as claimed in claim 19, wherein the first storage device is a capacitor.

29. (Previously Presented) A multi-stage storage system as claimed in claim 19, wherein the second storage device is a secondary battery.

30. (Previously Presented) A multi-stage storage system as claimed in claim 19, wherein the second storage device is a capacitor.

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31. (Previously Presented) A multi-stage storage system as claimed in claim 19, wherein the second storage device is a primary battery.

32. (Previously Presented) A multi-stage storage system as claimed in claim 19, further comprising a zener diode connected in series between the DC power source and the second storage device.

33. (Previously Presented) A multi-stage storage system as claimed in claim 19, further comprising a current-regulating diode connected in series between the DC power source and the second storage device.